

CLAIMS:

1. A method of electroplating a tubular workpiece comprising the steps of:

5 inserting a flexible linear auxiliary anode element into a hollow interior of the workpiece so that the anode element is insulated from an inner peripheral surface of the workpiece;

immersing the workpiece and the anode element in a plating liquid reserved in a plating bath; and

10 applying voltage between the auxiliary anode element and the workpiece.

2. The method of claim 1, wherein an insulating spacer is attached to the auxiliary anode element so that a liquid penetrating space is defined between the auxiliary anode element and the inner peripheral surface of the workpiece, and the auxiliary anode element with the insulating spacer attached thereto is inserted into the workpiece.

20 3. An electroplating auxiliary anode element which is inserted into a tubular workpiece so that an inner surface of the workpiece is electroplated, the anode element comprising:

25 a flexible metal wire connected to the anode element; and

a liquid penetrating insulating spacer attached to the metal wire.

4. An auxiliary anode element of claim 3, wherein the metal wire is formed by stranding thin wires of stainless steel together and has a connecting terminal on an end thereof.

5. An auxiliary anode element of claim 3, wherein the insulating spacer comprises an insulating tube fitted with a periphery of the metal wire, and the insulating tube has a number of liquid penetrating openings.

6. An auxiliary anode element of claim 3, wherein the insulating spacer is formed into the shape of a helical coil fitted with the periphery of the metal wire over an overall length thereof.

7. An auxiliary anode element of claim 3, wherein a plurality of the insulating spacers formed of a plastic material are attached to the metal wire, and each insulating spacer includes a plurality of annular plates fitted with the periphery of the metal wire and a plurality of frame plates formed integrally with the annular plates so as to extend axially with respect to the metal wire to thereby connect the annular plates together.

8. An auxiliary anode element of claim 7, wherein the annular plates are disposed at a center and both axial ends of the insulating spacer, and the annular plate disposed

at the center of the insulating spacer has a larger diameter than the annular plates disposed at the respective ends of the insulating spacer.

5 9. An auxiliary anode element of claim 4, wherein the insulating spacer comprises an insulating tube fitted with a periphery of the metal wire, and the insulating tube has a number of liquid penetrating openings.

10 10. An auxiliary anode element of claim 4, wherein the insulating spacer is formed into the shape of a helical coil fitted with the periphery of the metal wire over an overall length thereof.

15 11. An auxiliary anode element of claim 4, wherein a plurality of the insulating spacers formed of a plastic material are attached to the metal wire, and each insulating spacer includes a plurality of annular plates fitted with the periphery of the metal wire and a plurality of frame
20 plates formed integrally with the annular plates so as to extend axially with respect to the metal wire to thereby connect the annular plates together.

25 12. An auxiliary anode element of claim 11, wherein the annular plates are disposed at a center and both axial ends of the insulating spacer, and the annular plate disposed at the center of the insulating spacer has a larger diameter than the annular plates disposed at the respective ends of

~~the insulating spacer.~~

Add Q1